Commissioning on the rise in California

Since 2000, the California Commissioning Collaborative (CCC) has worked to promote commissioning best practices across the Golden State. This period has seen phenomenal growth in utility retrocommissioning (RCx) programs, the introduction of commissioning into the state's energy code, and the development of tools, guidelines and other valuable resources. The CCC continues to team with like-minded industry groups and firms to ensure commissioning is a core element in California's energy efficiency plans.

- **2000**: CCC formed as an ad hoc group with leadership from California Energy Commission, Lawrence Berkeley National Laboratory (LBNL), and utilities.
  - SMUD launches RCx program pilot (1999)
  - Commissioning incorporated into Savings by Design program

- **2004**: CCC incorporated as a California nonprofit
  - LBNL publishes commissioning test protocol library
  - LBNL completes High Performance Commercial Buildings Systems project with a major focus on commissioning.

- **2006**: CCC publishes commissioning guides for new and existing buildings
  - LBNL releases study on costs and benefits of commissioning
  - USGBC introduces LEED for existing buildings with RCx as prerequisite
  - LBNL releases study on persistence of SMUD RCx program savings

- **2008**: CCC commences 2006-2008 PIER research program
  - Functional testing and design guides are published
  - California Department of General Services publishes in-house commissioning guide for small buildings

- **2010**: CCC commences 2009-2012 PIER research program
  - USGBC adds ongoing commissioning to LEED for existing buildings
  - LBNL releases study on persistence of SMUD RCx program savings

- **2012**: CCC releases BOA savings calculation tool, co-developed by California investor-owned utilities
  - San Francisco adopts Existing Commercial Buildings Energy Performance Ordinance

- **2014**: CCC releases C-BOA, Building Performance Tracking Handbook, VoS guidelines, and ECAM v2.0
  - Title 24 acceptance testing research completed
  - PG&E hosts Whole Building Workshop

- **2016**: CCC commences work on CASE project to add design review to California Energy Efficiency Standards
  - ASHRAE releases Standard 202 (Commissioning Process for Buildings and Systems)

- **2018**: CCC develops 2016-2020 Strategic Plan
  - Senate Bill 350 names RCx as a key element toward doubling energy efficiency in California by 2030

---

1. RCx Program savings data from eestats.cpuc.ca.gov
2. usgbc.org

---

**California RCx Program Savings**

- 2000: 82,000,000 kWh, 1,700,000 therms
- 2006: 222,000,000 kWh, 7,000,000 therms
- 2010: 285,000,000 kWh, 9,500,000 therms
- 2014: 222,000,000 kWh, 7,000,000 therms
- 2016: 285,000,000 kWh, 9,500,000 therms

---

1. Historic Program savings data from materials provided by the CCC.